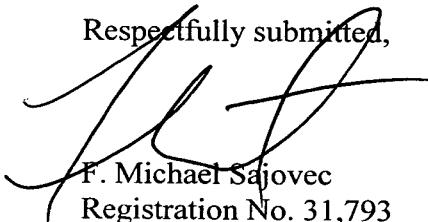


In re: Milligan et al.
International Appl. No. PCT/GB00/00585
International Filing Date: February 18, 2000
Page 4 of 7

REMARKS

Claims 1-29 and 32 are presented for examination. The above claims have been amended to better conform to U.S. practice. Applicants respectfully request substantive examination on the merits.

Respectfully submitted,


F. Michael Sajovec
Registration No. 31,793



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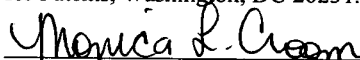
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Monica L. Croom

Date of Signature: August 17, 2001

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Version With Markings To Show Changes Made

IN THE SPECIFICATION:

Please amend the specification as follows:

At page one, following the title "Receptor Assay", please insert --This application claims priority from Great Britain Patent No. 9903467.3, filed February 2, 1999, the disclosure of which is incorporated by reference herein in its entirety.--

IN THE CLAIMS:

Please cancel Claims 30 and 31.

Please amend the claims as follows.

6. (Amended) The assay according to [any preceding] claim 1 wherein said assay is used to identify compounds that disrupt normal membrane receptor interactions, or can in themselves disrupt such interactions.

7. (Amended) The assay according to [any preceding] claim 1 for detecting a compound which serves as an inverse agonist, antagonist or agonist of the membrane receptor.

9. (Amended) The assay according to [any preceding] claim 1 wherein said membrane receptor is a growth factor receptor, cytokine receptor, ion channel, integrin, or G-protein receptor.

13. (Amended) The assay according to [any one of claims 9-12] claim 9 wherein said G-protein coupled receptor is a dopamine receptor, a muscarinic cholinergic receptor, an

α -adrenergic receptor, a β -adrenergic receptor, an opiate receptor, [an] a cannabinoid receptor, a serotonin receptor or a protease activated receptor.

14. (Amended) The assay according to [any preceding] claim 1 wherein the receptor/reporter fusion protein is expressed from nucleic acid construct comprising a gene encoding said reporter protein which is fused in-frame to the 5' or 3' end of a gene encoding said membrane receptor.

15. (Amended) The assay according to [any preceding] claim 1 wherein the functionality of said membrane receptor/reporter fusion protein is substantially unaffected by fusion of the reporter protein to the receptor.

16. (Amended) The assay according to [any preceding] claim 15 wherein said reporter protein is Green Fluorescent Protein (GFP), or active variant thereof.

18. (Amended) The assay according to [any one of claims 1-15] claim 15 wherein said reporter protein is *Renilla reniformis* (sea pansy) luciferase protein, secreted placental alkaline phosphatase (SEAP), β -lactamase, galactosidase, firefly (*Photinus pyralis*) luciferase, blue fluorescent protein, yellow fluorescent protein, and cyan fluorescent protein.

20. (Amended) The assay according to [any preceding] claim 1 wherein said reporter protein is used to localize and/or quantify the membrane receptor.

21. (Amended) An assay according to [any preceding] claim 20 wherein any change of said membrane receptor/reporter fusion protein is detected as a change in cellular localisation of the receptor/reporter fusion protein, or semi-quantitatively by the synthesis or degradation of said receptor/reporter fusion protein.

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22. (Amended) An assay according to **[any preceding]** claim 1 wherein said detection of any change of said membrane receptor/reporter fusion protein is carried out with cells placed on the surface of a microscope slide.

23. (Amended) The assay according to **[any preceding]** claim 1 wherein said detection of any change of said membrane receptor/reporter fusion protein is carried out on cells placed in a well of a microtitre plate **[or the like, such as a 96-well plate]**.

29. (Amended) The membrane receptor/reporter fusion protein according to **[either of claims 27 or]** claim 28 wherein the reporter protein is GFP or luciferase.

Please add the following new claim.

32. (New) The membrane receptor/reporter fusion protein according to claim 27 wherein the reporter protein is GFP or luciferase.

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